

CLAIMS

What is CLAIMED is:

1. The method of determining the orientation of teeth in a patient, comprising the steps of:

a) applying a mouthpiece and colored gel solution to the tooth of a patient so as to envelope said tooth, said mouthpiece further applied such that said gel solution is juxtaposed between and contacts with said mouthpiece and said tooth;

b) observing said colored gel solution through said mouthpiece;

c) determining the location of contact areas of said tooth to said mouthpiece by noting variations in color as denoted by said colored gel solution.

2. The method of Claim 1, wherein said mouthpiece is an aligner.

3. The method of Claim 2, wherein in step "c" said variations in color comprises a lighter color.

4. The method of Claim 3, wherein after step "c)" there is further provided the

additional step “d)” of determining the location of gaps between said tooth and said mouthpiece by noting darker colored areas as denoted by said colored gel solution.

5). The method of determining the orientation of teeth in a patient in an aligner, comprising the steps of:

- a. providing a viscous gel solution;
- b. applying said viscous gel solution to said aligner;
- c. applying said viscous gel solution and aligner to said patient;
- d. allowing the teeth of said patient to displace said gel in said aligner;
- e. observing said viscous gel solution through said aligner;
- f. determining areas on said aligner where said teeth contact said aligner by discerning lighter colored areas of said gel solution through said aligner.

6) The method of correcting mis-alignment in teeth in a patient, comprising the steps of:

- a. applying an aligner and viscous gel solution to the teeth of the patient;
- c. allowing the teeth of said patient to displace said viscous gel solution

between said aligner and said teeth;

d. observing said viscous gel solution through said aligner;

e. determining areas in said aligner where said teeth contact said aligner by discerning visually discernable variations of said gel solution through said aligner, providing contact points;

f. forming pressure deformations in said aligner in the vicinity of said contact points to urge that portion of said teeth contacting said aligner away from said aligner.

7) The method of Claim 6, wherein in step "f" there is provided the step of said patient wearing said aligner for a period of time, and there is provided after step "f." the additional step "g." of repeating steps a-e until there is no longer observed visually discernable variations of said gel solution through said aligner.

8. The method of Claim 7, wherein in step "e" said visually discernable variations of said gel solution comprises a color variation.

9. The method of Claim 8, wherein said color variation comprises a lighter color.

10. A system for observing orientation of teeth, comprising:

a mouthpiece having first and second walls and an open area therebetween, said mouthpiece formed of light permeable material;

a colored gel composition having light transmissivity properties;

whereby, upon the application of said mouthpiece to said teeth with said gel composition situated therebetween, said gel composition fills the voids between said teeth and said mouthpiece, said gel composition formulated such that variations of distance between said mouthpiece and said teeth are observable through said mouthpiece as color variations, such that uniform spaces between said teeth and said mouthpiece are indicated as a uniform color, pressure points are indicated as a lighter color to said uniform color, and gaps are indicated as a darker color to said uniform color.

11. The system of Claim 10, wherein said colored gel CREST FOR KIDS brand toothpaste.

12. The system of Claim 11, wherein said colored gel composition has a viscosity range of about 20,000 – 80,000 centipoise .

13. The system of Claim 12, wherein said colored gel composition is of

a dark color.

14. The method of determining the orientation of teeth through an aligner, comprising the steps of:

a. applying a layer of colored gel composition having light transmissive properties between said aligner and said teeth;

b. utilizing said light transmissive properties of said colored gel composition to indicate via color variations, variations in the spaced between said teeth and said aligner;

c. observing said color variations through said aligner to discern variations in the space between said teeth and said aligner.

15. The method of determining the orientation of teeth through an aligner, comprising the steps of:

a. applying a colored gel to a light transmissive or clear mouthpiece-type aligner;

b. mounting said aligner with gel to the teeth;

c. allowing said teeth to displace said gel within said aligner;

d. observing through said aligner color variations generated by

variations in the density of said gel, wherein pressure points are indicated as lighter colors due to less gel density and spaces are indicated as deeper color, due to higher density of the colored gel.

16. A system for observing orientation of teeth, comprising:

a mouthpiece having first and second walls and an open area therebetween, said aligner formed of light permeable material;

a colored gel composition having a plurality of rupturable microspheres containing color indicia means;

whereby, upon the application of said mouthpiece to said teeth with said gel composition situated therebetween, said gel composition fills the voids between said teeth and said mouthpiece, said microspheres rupturing upon the application of pressure at contact points where the teeth contact said aligner, dispensing said color indicia means at said contact point, providing dispensed color indicia means.

17. The system of Claim 16, wherein said color indicia means is visually observable through said aligner.

18. The system of Claim 16, wherein said color indicia means marks

said aligner in the vicinity of said contact point.

19. a system for observing orientation of teeth, comprising:

a mouthpiece having first and second walls and an open area therebetween, said aligner formed of light permeable material;

a colored gel composition having a plurality of rupturable, colored microspheres colors, respectively;

whereby, upon the application of said mouthpiece to said teeth with said gel composition situated therebetween, said gel composition fills the voids between said teeth and said mouthpiece, while said microspheres are displaced from contact areas where said teeth contact said aligner, so as to provide visually discernable indication of said contact areas through said aligner.

20). The method of determining the orientation of teeth in a patient in an aligner, comprising the steps of:

- a. providing a viscous gel solution;
- b. applying said viscous gel solution to said aligner;
- c. applying said viscous gel solution and aligner to said patient;
- d. allowing the teeth of said patient to displace said gel in said aligner;

e. photographing said viscous gel solution through said aligner, providing a photograph;

f. analyzing said photograph to determine areas on said aligner where said teeth contact said aligner by discerning lighter colored areas of said gel solution through said aligner.

21) The method of correcting mis-alignment in teeth in a patient, comprising the steps of:

a. applying an aligner and viscous gel solution to the teeth of the patient;

c. allowing the teeth of said patient to displace said viscous gel solution between said aligner and said teeth;

d. photographing said viscous gel solution through said aligner, providing a photograph;

e. analyzing said photograph to determine areas in said aligner where said teeth contact said aligner by discerning visually discernable variations of said gel solution through said aligner, providing contact points;

f. forming pressure deformations in said aligner in the vicinity of said contact points to urge that portion of said teeth contacting said aligner away

from said aligner.

22) The method of Claim 21, wherein there is provided the additional step "g" of repeating steps a-f, until said mis-alignment has been corrected.